

REMARKS

In the present Office Action, the Examiner has rejected the claims as being indefinite and as being anticipated by U.S. Pat. No. 5,210,015 (Gelfand). Each of these rejections is addressed below.

I) The Claims Are Definite

Claim 112 is rejected as allegedly being indefinite for failing to recite a method step that links to the preamble of the claim. While Applicants respectfully disagree, in order to further the prosecution of the present application and Applicants' business interests, while preserving the right to pursue the previous claims (of similar claims) in the future, Applicants have amended the claim as suggested by the Examiner. In view this amendment, Applicants request that the rejection be withdrawn.

Claim 116 is rejected as allegedly lacking antecedent basis for the phrase "said oligonucleotide hybridization sites." Applicants have corrected this error by having Claim 116 claim priority to Claim 113 (which recites a second oligonucleotide) rather than Claim 112, and by clarifying the language of the claim.

II) The Claims Have Previously Been Found Novel In View Of Gelfand

The Examiner has rejected the claims as being anticipated by Gelfand. Applicants note that the present claims are copied from U.S. Patent Nos. 6,110,677 and 6,121,001. The Gelfand reference was cited in those cases and the claims were allowed and issued in view of Gelfand. In particular, as shown below, the Examiner in the prior cases noted that the Gelfand reference failed to teach methods employing isothermal conditions as recited in the claims and failed to teach oligonucleotides having a 5'-portion that does not hybridize to the target polynucleotide. It is noted that in the present rejection, the Examiner has not stated or suggested that Gelfand teaches such elements. Thus, the Patent Office has already taken the position that Gelfand does not teach these elements, a position that is not contradicted by the present examination.

For the Examiner's convenience the following is taken verbatim from the Examiner's statement of reasons for allowance in the 6,110,677 patent:

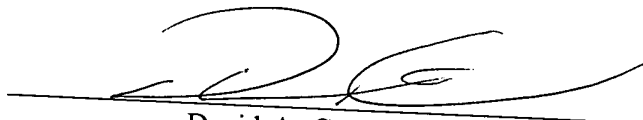
Gelfand (U.S. Patent No. 5,210,015) teaches a method for detection of a target nucleic acid that utilizes a 5'-nuclease and two oligonucleotides, a "labeled oligonucleotide" and a "first oligonucleotide". In Gelfand's methods, a "labeled oligonucleotide", like the "first oligonucleotide" of the instant invention, is hybridized to a target polynucleotide and degraded by a 5'-nuclease to produce detectable, labeled fragments (see, for example, col 2, lines 23-47). Gelfand further employs a "first oligonucleotide" (equivalent to Applicant's "second oligonucleotide") that hybridizes such that its 3'-end is adjacent to the 5' end of the labeled oligonucleotide (col 2, lines 23-47). Gelfand's oligonucleotides and target polynucleotide are incubated together under "hybridization conditions, conditions which enable the binding of primers and probes to the single nucleic acid strands" (col 8, lines 4-7). While Gelfand states that his process "is especially suited for analysis of nucleic acid amplified by PCR" (col 2, lines 48-49), Gelfand suggests that his method may also be performed in the absence of amplification (col 7, lines 40-52). However, Gelfand does not teach or suggest employing in his method isothermal conditions in which an equilibrium is established and under which oligonucleotide fragments are continuously produced, as required by instant claims 64-83. Furthermore, Gelfand does not teach or suggest employing a first oligonucleotide having "a 5'-portion which does not hybridize" to the target polynucleotide, as required by claims 64-83. . . .

In view of the above, Applicants respectfully request that the rejection be withdrawn.

CONCLUSION

Applicants submit that the case is in condition for an Interference to be declared between the present application and U.S. Patents 6,110,677 and 6,121,001. If an interview would aid in the prosecution of this Application, the Examiner may call the undersigned at 608-218-6900.

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